

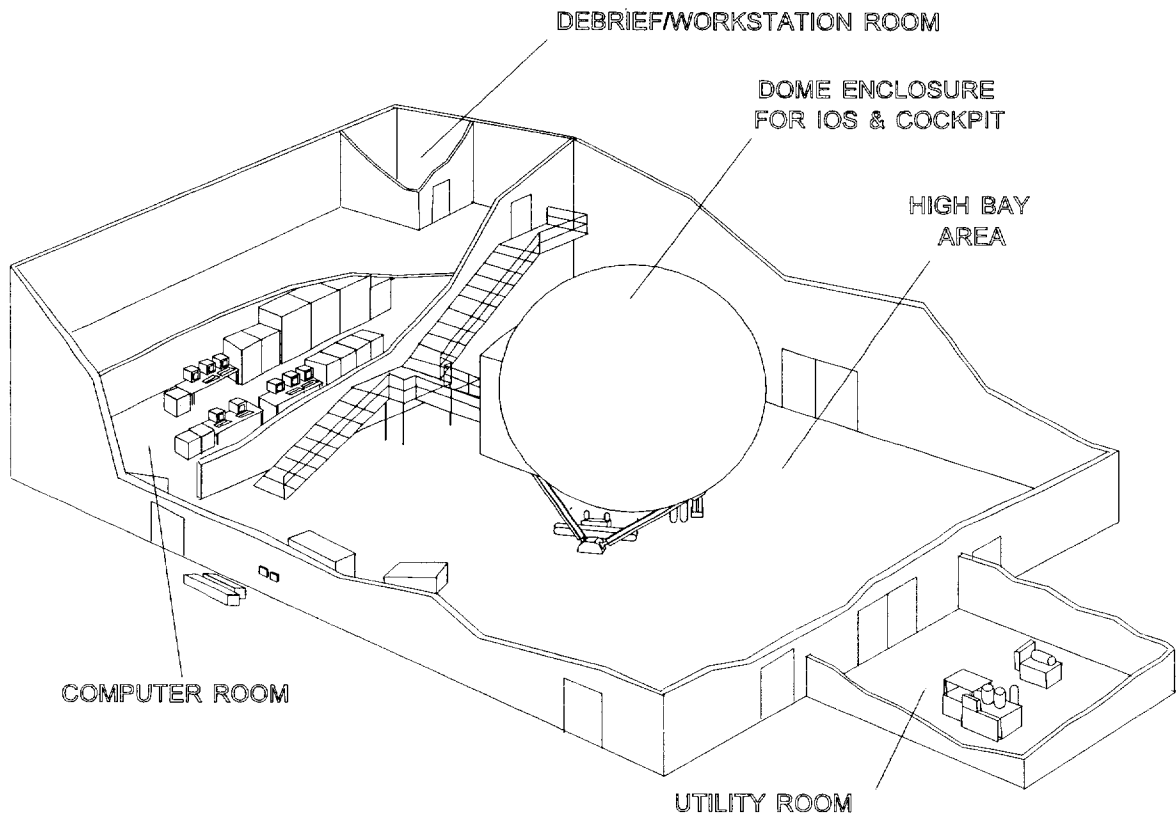
**SUMMARY OF  
UH-1N ACFT WEAPON SYSTEM TRAINER (HELICOPTER)**

January 1998

Device 2F161

**NAVAL AIR WARFARE CENTER TRAINING SYSTEM DIVISION**

**ORLANDO, FLORIDA**



**TRAINING CATEGORY:**

Flight Simulator

**ORIGINATING AGENCY:**

CNO/AIR

**SECURITY CLASSIFICATION OF DEVICE:**

Device 2F161 is secret.

**PURPOSE OF DEVICE:**

The device provides a realistic flight environment in which a pilot can develop the skills and techniques needed to efficiently and safely fly the UH-1N Helicopter in a medium assault transport

mission.

**INTENDED USE:**

The device is intended to provide an accurate simulated cockpit environment for the trainee pilot/copilot and provide extensive monitoring and control capabilities for the instructor. The trainer is designed for the training of UH-1N crew members and simulates as closely as possible many functions of the UH-1N helicopter.

**FUNCTIONAL DESCRIPTION:**

The device simulates the UH-1N helicopter performance during cockpit pre-flight,

engine start, vertical/stationary takeoff and landing, navigation flight, landing, engine shutdown, and cockpit post-flight. Simulation in the trainer is supported by a full-color visual display system, aural system, and a six-degree-of-freedom motion system. The visual system provides out-the-window display under day, night, and dusk conditions for both pilot and copilot. The aural system provides normal and abnormal aural cues during flight and ground operations. The motion system provides the effects of attitude, acceleration, rate, and displacement of all aircraft ground and flight operations.

### PHYSICAL INFORMATION:

There are 57 units identified in the Trainer Configuration Report. These units are located in four areas. The floor space occupied by the device is listed below.

High Bay Area - 50' X 50", with a 40' ceiling.

Computer Room - 50' X 26'8", with a 9' ceiling.

Utility Room - 17'6" X 17'6", with a 9' ceiling.

Debrief Workstation Room - 10' X 15', with a 9' ceiling.

The empty weight of the entire device is 52,532 pounds.

### EQUIPMENT REQUIRED (NOT SUPPLIED):

None.

### POWER REQUIREMENTS:

The device power requirements are listed below.

208/120 Volt, 60 Hertz, 3 Phase (600 ampere service).

Simulation Equipment - 200 amperes  
Visual Equipment - 200 amperes  
Emergency Power Off - 5 amperes

480/277 Volt, 60 Hertz, 3 Phase (200 ampere service).

Visual A/C Evaporator - 40 amperes  
Visual A/C Condenser - 30 amperes  
Cockpit A/C Evaporator - 15 amperes  
Cockpit A/C Condenser - 15 amperes

480/277 Volt, 60 Hertz, 3 Phase (600 ampere service).

Control Loading Hydraulic Pump - 50 amperes  
Motion Hydraulic Pump - 400 amperes

### PUBLICATIONS FURNISHED:

Operation and Maintenance Instructions with Parts Catalog, UH-1N Weapon System Trainer, Device 2F161, NTSC P-6965, 5 Volumes, (U).

Maintenance Requirement Cards, UH-1N Weapon System Trainer, Device 2F161, NTSC P-6966, (U).

Commercial Documentation Set, UH-1N Weapon System Trainer, Device 2F161, NTSC P-6967, (U).

Instructor Utilization Handbook, UH-1N Weapon System Trainer, Device 2F161, NTSC P-6968, (U).

### PERSONNEL:

Instructor: Instructor Pilot.

Operator: Support Technician.

Trainees: Two per training sortie.

Maintenance: Four simulator technicians to support an 8 hour training day.

### CONTRACT IDENTIFICATION:

Manufactured by Hughes Training Inc., Herndon, Virginia, under NAVAIRWARCENTRASYS DIV Contract No. N61339-91-C-0059.

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